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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,741	03/22/2005	Paolo Scudieri	NOTAR-022US	4198

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ALISO VIEJO, CA 92656

EXAMINER
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VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/528,741

Applicant(s)

SCUDIERI, PAOLO

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0523.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Claim Objections***

1. Claims 1-12 are objected to because of the following informalities: The phrase "characterized in that" is preferably changed to -- wherein-- or --comprising-- in accordance with US Patent Practice. Further, the "PES" needs to be spelled out for purposes of clarity.

With respect to claim 2, the Markush group is preferably used. Additionally, the phrase "similar in combination or alone" is preferably changed to --combinations therefor--.

With respect to claims 9 and 10, delete " amounts expressed in percentages by weight falling within the range from 5 to 50" and replace with -- an amount of 5 to 50% by weight-- in accordance with US Patent Practice. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent

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protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 11 recites the broad recitation "broadly curvilinear shape", and the claim also recites "circular or oval or elliptical" which is the narrower statement of the range/limitation.

It is unclear what impressions are meant. Does Applicant want to convey the projections formed on the surface of the foam material?

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 81/01816. WO'816 teaches a composite roof insulation board comprising a foam layer 2 and a fiberglass mat 7 attached to the foam layer (page 11, second

paragraph). The foam layer contains glass fibers uniformly dispersed thereof (page 11). The foam is made from a polyethylene glycol having a molecular weight of at least 150, and a polymethylene-polyphenylisocyanate (claim 8). WO'816 does not specifically disclose the visco-elastic polyurethane foam. However, it appears that the foam is made from the composition similar to the foam composition of the present invention. Therefore, it is not seen that the viscoelastic property could not have been inherently present. Like material has like property. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Accordingly, WO'816 anticipates the claimed subject matter.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by EP 99118955. US 6,499,797 to Bohm et al is relied on as an English translation of EP 99118955. Bohm teaches a composite component for vehicle bodywork comprising a foam plastic reinforced with glass fibers and an outer skin made from textile fiber mat as shown in figure 8 (column 6, lines 35-50). Accordingly, Bohm anticipates the claimed subject matter.
7. Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Mollendorf (US 2004/0142149). Mollendorf teaches a composite insulation material comprising a foam material having both sides laminated with a cloth like material [0097]. The foam material comprises a silicone rubber reinforced with glass microspheres [0094]. The foam has a plurality of circular indentations on the surface

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thereof as shown in figures 5B. Accordingly, Mollendorf anticipates the claimed subject matter.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 81/01816 as applied to claim 1 above, and further in view of Deguiseppi et al (US 4,237,238). WO'816 does not specifically disclose the hydroxyl number and functionality of ethylene oxides. Deguiseppi, however, discloses the polyisocyanurate foam for use in thermal insulation comprising ethylene oxides Terate ® 202-25 having the hydroxyl number of 452 and functionality of 3 within the claimed range (column 7, lines 15-18). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the ethylene oxides having the hydroxyl number and functionality as taught by Deguiseppi because such is an intended use of the material and Deguiseppi provides necessary details to practice the invention of WO'816.

10. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 81/01816 as applied to claim 1 above, and further in view of Ray et al (US 3,931,064). WO'816 does not specifically disclose the amount and particle size of the inorganic fillers. Ray, however, discloses the polyisocyanurate foam for use in

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thermal insulation comprising inorganic particles present in the amount of 10 to 30% by weight and having a particle size from 0.1 to 300 microns (column 3, lines 30-35, and 54-55). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the inorganic particles with the particle size and the amount in the ranges as taught by Ray motivated by the desire to impart the mechanical strength of the foam material while facilitating the mixing and dispersion of the inorganic particles in the foam composition.

11. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pershing (US 3,833,259) in view of Lockwood et al (US 2004/0254256). Pershing teaches a vehicle seat comprising three foam layers, an upper layer and a lower layer of polyurethane foam separated by a polyethylene foam. Pershing does not specifically disclose the polyurethane foam containing an uniformly dispersed inert filler material. Lockwood, however, teaches a viscoelastic polyurethane foam for use in wheelchair seats for impact protection comprising an ethylene oxide, an isocyanate and a particulate filler present in an amount of less than 20% by weight [0095]. Lockwood discloses the ethylene oxide having a molecular weight, hydroxyl number and functionality within the claimed ranges [0071, 0075]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the viscoelastic polyurethane foam of Lockwood for the foam layer of Pershing motivated by the desire to impart impact protection.

Lockwood does not specifically disclose the particle size of the glass fibers. However, since the particle size is recognized as a result-effective variable,

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differences in particle size will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such particle size is critical or provides unexpected results. Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the glass fibers with the particle size in the range instantly claimed motivated by the desire to balance the strength of the foam and an ease of processing and handling of the material. This is in line with *In re Aller*, 105 USPQ 233 which holds discovering the optimum or workable ranges involves only routine skill in the art.

12. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 99118955. Bohm teaches the foam plastic layer having a plurality of parallel grooves affecting the sound reflection. Bohm does not specifically the foam with impressions having a broadly curvilinear shape with a dimension as recited by the claims. However, *In re Dailey*, 149 USPQ 47 (CCPA 1976), there is nothing in Applicant's disclosure to shown that the particular shape of the protrusions or the grooves is significant or is anything more than one of numerous shapes a person of ordinary skill in the art would find obvious for the purpose of sound reflection, therefore, the shape of protrusions or the grooves in itself would not render the claims patentable over Bohm.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mollendorf (US 2004/0142149). Mollendorf does not specifically disclose the dimension of the circular indentations. However, Mollendorf teaches the size and the shape of the



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indentations can be varied to result in desirable anisotropic behavior of the composite insulation material [0051]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the indentations having the dimension in the range instantly claimed motivated by the desire to achieve the desired anisotropic property of the composite insulation material. This is also in line with *In re Aller*, 105 USPQ 233 which holds discovering the optimum or workable ranges involves only routine skill in the art.

### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

*Hai Vo*

**HAI VO  
PRIMARY EXAMINER**